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REMARKS

Claims 1 - 15 are pending in the present application.

In section 1 of the Office Action, claims 1 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,416,847 to Boze (hereinafter "the Boze patent") in view of U.S. Patent No.6,580,705 to Riazi et al. (hereinafter "the Riazi et al. patent"). Applicant notes that the introductory sentence of section 1 of the Office Action states that claims "1 - 7" are rejected. However, from sections 2 - 16 of the Office Action, it is clear that all of claims 1 - 15 are being rejected. Nevertheless, Applicant is traversing this rejection.

Claim 1 provides for a method for correcting a measured signal. The method includes, inter alia, reproducing a sampled signal sequence to yield a plurality of copies of the sampled signal sequence, and appending the plurality of copies to one another to yield a signal series.

For example, the specification, at page 8, lines 4 - 9, with reference to FIG. 3, describes a signal multiplication unit 200 that reproduces a sampled signal and appends it n-1 times to yield an n-periodic signal. More particularly, in FIG. 3, the sampled signal of one period, i.e., n = 1, is reproduced and appended nineteen times to yield a resultant having twenty periods, i.e., n = 20.

The Boze patent is directed toward an audio noise filter (title). With reference to FIG. 1, the Boze patent a filter that includes an analog-to-digital (A/D) converter 15 that samples an analog signal and provides a sampled signal to a finite impulse response (FIR) filter (col. 4, lines 49 – 65). As is apparent from FIG. 1, the sampled signal from A/D 15 is also provided to a module 87 that performs a Fast Fourier Transform (FFT).

The Office Action, in a passage bridging pages 2 and 3, recognizes that the Boze patent does not disclose reproducing a sampled signal sequence to yield a plurality of copies of a sampled signal sequence, and appending the plurality of copies to one another to yield a signal series. Hence, the Office Action introduces the Riazi et al. patent.

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The Riazi et al. patent is directed towards a technique for improving quality of service for wireless transmissions systems that employ two or more different modulation schemes (col. 1, lines 50 – 53). With reference to FIG. 1, the Riazi et al. patent discloses a transmitter 100 (col. 3, lines 29 – 30) in which a synchronized packet data 125 is (a) modulated to produce a TDM1 signal 175, and (b) delayed by a delay buffer 180 and modulated to produce a TDM2 signal 185 (col. 3, lines 51 – 65). Thus, TDM2 signal 185 is delayed with respect to TDM1 signal 175. FIG. 2 is a block diagram of a receiver 200 (col. 4, line 16) in which TDM1 signal 175 is delayed at a delay buffer 224 by an amount equivalent to the delay of TDM2 signal 185, to synchronize the two TDM signals (col. 4, lines 39 – 43). Each of demodulated signals 227 and 233 is then time-aligned in a synchronizing block 257, and output from synchronizing block 257 as TDM1 signal 260 and TDM2 signal 263 (col. 4, line 65 – col. 5, line 4). Synchronizing block 257 also outputs an OFDM signal 266 that is also time-aligned with TDM1 signal 260 and TDM2 signal 263 (col. 5, line 3). A combining block 269 combines the three time-aligned signals 260, 263 and 266 to generate a combined output signal 272 (col. 5, lines 4 – 6). As explained at col. 5, lines 10 – 15, the combining can be performed according to an equation, namely:

$$r_1$$
*sqrt(SNR₁) + r_2 *sqrt(SNR₂) + r_3 *sqrt(SNR₃)

As is apparent from this equation, the combining involves an <u>arithmetic addition</u> of components from each of the three time-aligned signals, and as such, <u>combining is not the same as appending</u>.

With regard to the cited combination of the Boze and Riazi et al. patents, as a preliminary point, the Office Action has neither explained nor suggested how such a combination could be implemented. For example, since the system in the Riazi et al. patent employs both of a transmitter and a receiver, it is not clear how or why the transmitter and the receiver would be integrated into the audio noise filter of the Boze patent. Applicant submits that an audio noise filter does not typically include a transmitter and a receiver, and therefore, Applicant further submits that an integration of the transmitter and the receiver of the Riazi et al. patent into the audio noise filter of the Boze patent would change the principle of operation of the audio noise filter of the Boze patent. Hence, the cited combination of the Boze and Riazi et al. patents is improper for purposes of a section 103(a) rejection of claim 1.

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Moreover, since, in the Riazi et al. patent, synchronizing block 257 outputs time-aligned signals TDM1 signal 260 and TDM2 signal 263, and combining block 269 combines timealigned signals 260, 263 and 266, and since combining is not the same as appending, the Riazi et al. patent does not disclose appending time-aligned signals 260, 263 and 266 to one another. Consequently the cited combination of the Boze and Riazi et al. patents does not disclose or suggest appending a plurality of copies (of a sampled signal sequence) to one another to yield a signal series, as recited in claim 1.

For the reasoning provided above, Applicant submits that claim 1 is patentable over the cited combination of the Boze and Riazi et al. patents.

Independent claims 7 - 11 each include recitals similar to those of claim 1, as described above. Accordingly, claims 7 - 11, for reasoning similar to that provided in support of claim 1, are also patentable over the cited combination of the Boze and Riazi et al. patents.

Claims 2 – 6 and 12 depend from claim 1, claim 13 depends from claim 7, claim 14 depends from claim 8, and claim 15 depends from claim 11. By virtue of these dependencies, claims 2-6 and 13-15 are also patentable over the cited combination of references.

In view of the foregoing, Applicant respectfully that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicant respectfully requests favorable consideration and that this application be passed to allowance.

5/22/06

Respectfully submitted.

Reg. No. 31,019

Attorney for the Applicant

Ohlandt, Greeley, Ruggiero & Perle, L.L.P.

One Landmark Square, 10th Floor

Stamford, CT 06901-2682

Tel: 203-327-4500 Fax: 203-327-6401